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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,079	03/30/2001	Errol C. Heiman	STL9524	6981

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SEAGATE TECHNOLOGY LLC C/O WESTMAN
CHAMPLIN & KELLY, P.A.
SUITE 1400 - INTERNATIONAL CENTRE
900 SECOND AVENUE SOUTH
MINNEAPOLIS, MN 55402-3319

EXAMINER

LEROUX, ETIENNE PIERRE

ART UNIT	PAPER NUMBER
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2161

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/823,079

Applicant(s)

HEIMAN ET AL.

Examiner

Etienne P LeRoux

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/2/2005 - Appeal Brief.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Prosecution Reopened

In view of the Appeal Brief filed on 5/2/2005, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Status:

Claims 18-37 are pending; claims 1-17 having been canceled. Claims 18-37 are rejected as detailed below.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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Claims 18-37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 18 recites "circuitry configured to introduce disturbances into the constant power supply voltage applied to the electronic device, a disturbance configured to simulate an unexpected and random change in the nominal power supply voltage." The specification does not contain a written description of the circuitry which produces an unexpected and random change in the nominal power supply voltage such that a skilled artisan can make and use the invention.

Claim 28 includes language similar to the above and is rejected for reasons similar to the above.

Claim 18 recites "wherein the disturbances introduced into the constant power supply voltage applied to the electronic device are controllable." The specification does not contain a written description of the apparatus which is able to control unexpected and random changes in the nominal power supply voltage such that a skilled artisan can make and use the invention.

Claim 28 includes language similar to the above and is rejected for reasons similar to the above.

Claim 19 recites "wherein the disturbance is a rising pulse having a maximum voltage which is controllable." The specification does not contain a written description of the apparatus which is able to control the maximum voltage of a rising pulse. In fact, the word "pulse" is not even included in applicant's specification.

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Claims 20-26 and 29-37 are rejected for being dependent on a rejected base claim.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 18-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The scope of the invention is difficult to ascertain because the specification does not contain a clear and precise definition of the claimed unexpected and random change.

Unexpected and random change is made indefinite by the following disclosure by applicant in paragraph 23 of the specification:

Detail Description Paragraph:

[0023] Voltage disruption frequency and voltage disruption time duration are determined by counter timers on the multifunction I/O board, specifically, 255. When line 255 asserts a voltage disruption, each of the individual high voltage drivers, 260 and 262, outputs assert to the operational amplifier's voltage, which is then reflected at the base terminals of transistors 220 and 222. This puts transistors 220 and 222 to assume a proportional conduct state and then diodes 224 and 226 serve to block the higher voltage, from transistors 220 and 222, conduction from entering the lower voltage power supplies. The result is a controlled voltage spike for a specific duration.

Examiner maintains above disclosure by applicant of voltage disruption frequency and voltage disruption time does not support the claimed "unexpected and random change in the nominal power supply voltage." For purposes of this Office action, examiner assumes that changes in the nominal power supply voltage are per design and are controllable within predefined threshold limits. For purposes of this examination, examiner will not give "unexpected and random change" patentable weight. Examiner will consider prior art which

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introduces disturbances in the nominal power supply voltage of an electronic device per applicant's specification.

Claim 28 includes language similar to the above and is rejected for the same reasons.

Claim 20 recites "a minimum voltage being less than the voltage." There is insufficient antecedent basis for "the voltage."

Claim 37 recites "including providing a 0 VDC voltage for a preselected duration of time after the voltage is coupled to the connector." The scope of the invention is difficult to ascertain because it is unclear from the specification what is the preselected duration, what is 0 VDC and what comprises applying 0 VDC after the voltage is coupled to the connector.

Claims 19, 21-27 and 29-36 are rejected for being dependent on a rejected base claim.

Art Rejection Precluded

Claim 37 is rejected under 35 U.S.C. § 112, first paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. No art rejection is made in this Office action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 18-20, 22, 24-26, 28-30, 32, 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat No 4,879,623 issued to Baumgartner et al (hereafter Baumgartner) in view of US Pat No 6,151,182 issued to Koizumi et al (hereafter Koizumi), as best examiner is able to ascertain.

Claims 18 and 28:

Baumgartner discloses:

a power source supplying the constant power supply voltage at the nominal power supply voltage of the electronic device [Fig 2, TP1, 48V]

circuitry [Fig 1, 14, 16, Fig 2] configured to introduce disturbances into the constant power supply voltage applied to the electronic device, a disturbance configured to simulate a change in the nominal power supply voltage, wherein the disturbances introduced into the constant power supply voltage applied to the electronic device are controllable [Fig 3, 62, 68, 70 and 72, col 6, lines 1-5]

Baumgartner discloses the essential elements of the claimed invention as noted above but does not disclose a connector coupled to the power source, the connector adapted to connect the constant power supply voltage to a power supply input on the electronic device. Koizumi discloses a connector coupled to the power source, the connector adapted to connect the constant power supply voltage to a power supply input on the electronic device [Fig 2, 101, 201, 203 and Fig 1, 103, col 11, lines 13-16]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Baumgartner to include a connector coupled to the power source, the connector adapted to connect the constant power supply voltage to a power

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supply input on the electronic device as taught by Koizumi for the purpose of connecting a device such as a disk drive to a centralized power source [col 11, lines 13-16].

Claim 19:

The combination of Baumgartner and Koizumi discloses the elements of claim 18 as noted above and furthermore, Baumgartner discloses wherein the disturbance is a rising pulse having a maximum voltage which is controllable [Fig 2, Fig 3, 62, 68, 70 and 72, col 6, lines 1-5].

Claim 20:

The combination of Baumgartner and Koizumi discloses the elements of claim 18 as noted above and furthermore, Baumgartner discloses wherein the disturbance is a low-going pulse having a minimum voltage being less than the voltage [Fig 2].

Claim 22:

The combination of Baumgartner and Koizumi discloses the elements of claim 18 as noted above and furthermore, Koizumi discloses an additional power source supplying an additional voltage wherein the additional power source is adapted to connect the additional voltage to an additional connector [Fig 2, 203].

Claim 24:

The combination of Baumgartner and Koizumi discloses the elements of claim 18 as noted above and furthermore, Baumgartner discloses a manually operated user interface used to control the disturbances [Fig 3, 72].

Claim 25:

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The combination of Baumgartner and Koizumi discloses the elements of claim 18 as noted above and furthermore, Baumgartner discloses wherein the disturbance is a plurality of pulses and a frequency and a number of pulses in the plurality of pulses are controllable [Fig 2, Fig 3, 62, 68, 70 and 72, col 6, lines 1-5]

Claim 26:

The combination of Baumgartner and Koizumi discloses the elements of claim 18 as noted above and furthermore, Baumgartner discloses wherein the disturbance is at least one pulse having a duration and a magnitude which are controllable [Fig 2, Fig 3, 62, 68, 70 and 72, col 6, lines 1-5]

Claim 27:

The combination of Baumgartner and Koizumi discloses the elements of claim 18 as noted above and furthermore, Baumgartner discloses wherein the disturbance comprises a voltage sequence applied during powering up of the electronic device [Fig 2].

Claim 29:

The combination of Baumgartner and Koizumi discloses the elements of claim 28 as noted above and furthermore, Baumgartner discloses wherein the disturbance is a rising pulse having a maximum voltage which is controllable [Fig 2, Fig 3, 62, 68, 70 and 72, col 6, lines 1-5].

Claim 30:

The combination of Baumgartner and Koizumi discloses the elements of claim 28 as noted above and furthermore, Baumgartner discloses wherein the disturbance is a low-going pulse having a minimum voltage being less than the voltage [Fig 2].

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Claim 32:

The combination of Baumgartner and Koizumi discloses the elements of claim 28 as noted above and furthermore, Koizumi discloses an additional power source supplying an additional voltage wherein the additional power source is adapted to connect the additional voltage to an additional connector [Fig 2, 203].

Claim 34:

The combination of Baumgartner and Koizumi discloses the elements of claim 18 as noted above and furthermore, Baumgartner discloses a manually operated user interface used to control the disturbances [Fig 3, 72].

Claim 35:

The combination of Baumgartner and Koizumi discloses the elements of claim 28 as noted above and furthermore, Baumgartner discloses wherein the disturbance is at least one pulse having a duration and a magnitude which are controllable [Fig 2, Fig 3, 62, 68, 70 and 72, col 6, lines 1-5]

Claim 36:

The combination of Baumgartner and Koizumi discloses the elements of claim 28 as noted above and furthermore, Baumgartner discloses wherein the disturbance is a plurality of pulses and a frequency and a number of pulses in the plurality of pulses are controllable [Fig 2, Fig 3, 62, 68, 70 and 72, col 6, lines 1-5]

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Claims 21 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Baumgartner and Koizumi and furthermore in view of US Pat No 5,386,183 issued to Cronvich et al (hereafter Cronvich), as best examiner is able to ascertain.

Claim 21:

The combination of Baumgartner and Koizumi discloses the elements of claim 18 as noted above but does not disclose wherein the constant power supply voltage is selected from the group of voltages consisting of +5 VDC and +12 VDC. Cronvich discloses wherein the constant power supply voltage is selected from the group of voltages consisting of +5 VDC and +12 VDC [Fig 3 and col 12, lines 23-26]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above combination of references to include wherein the constant power supply voltage is selected from the group of voltages consisting of +5 VDC and +12 VDC as taught by Cronvich for the purpose of providing a power source suitable for many microcomputer and logic circuits [col 12, lines 23-26].

Claim 31:

The combination of Baumgartner and Koizumi discloses the elements of claim 28 as noted above but does not disclose wherein the constant power supply voltage is selected from the group of voltages consisting of +5 VDC and +12 VDC. Cronvich discloses wherein the constant power supply voltage is selected from the group of voltages consisting of +5 VDC and +12 VDC [Fig 3 and col 12, lines 23-26]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above combination of references to include wherein the constant power supply voltage is selected from the group of voltages consisting of

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+5 VDC and +12 VDC as taught by Cronvich for the purpose of providing a power source suitable for many microcomputer and logic circuits [col 12, lines 23-26].

Claims 23 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Baumgartner and Koizumi and furthermore in view of US Pat No 4,764,652 issued to Lee et al (hereafter Lee), as best examiner is able to ascertain.

Claim 23:

The combination of Baumgartner and Koizumi discloses the elements of claims 18 and 22 as noted above but does not disclose wherein the additional voltage is +24VDC. Lee discloses +24VDC [col 1, lines 55-60]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above combination of references to include wherein the additional voltage is +24VDC as taught by Lee for the purpose of including a power supply voltage that is used for telecommunications equipment [col 1, lines 55-60].

Claim 33:

The combination of Baumgartner and Koizumi discloses the elements of claims 28 and 32 as noted above but does not disclose wherein the additional voltage is +24VDC. Lee discloses +24VDC [col 1, lines 55-60]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above combination of references to include wherein the additional voltage is +24VDC as taught by Lee for the purpose of including a power supply voltage that is used for telecommunications equipment [col 1, lines 55-60].

Response to Arguments

Applicant's arguments filed 5/2/2005 with respect to claims 18-37 have been fully considered but are moot based upon above new grounds of rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne P LeRoux whose telephone number is (571) 272-4022. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on (571) 272-4023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Etienne LeRoux

6/13/2005


SAFET METJAHIC
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100